



28 November 2000

Ms. Claudia Sait
Maine Department of Environmental Protection
State House, Station 17
Augusta, Maine 04333-0017

Mr. Anthony Williams
Naval Air Station Brunswick
Public Work Environmental
437 Huey Drive
Brunswick, Maine 04011-5008

Mr. Michael Barry
U.S. Environmental Protection Agency, Region I
JFK Federal Building
90 Canal Street
Boston, Massachusetts 02214

RE: Final Explanation of Significant Difference for the Installation Restoration Program Remedial Action
for the Eastern Plume, Naval Air Station, Brunswick, Maine
Contract No. N62472-92-D-1296; Contract Task Order No. 0047
EA Project No. 29600.47.7613

Dear Ms. Sait/Mr. Williams/Mr. Barry:

On behalf of the Department of the Navy, EA Engineering, Science, and Technology is pleased to provide the final Explanation of Significant Difference (ESD) for the Installation Restoration Program Remedial Action for the Eastern Plume, Naval Air Station, Brunswick, Maine for concurrence and signature by the regulatory and lead agencies.

Please review and sign the enclosed ESD, or attach a letter of concurrence to the ESD, and forward this original version to the next agency for review and signature/concurrence of the final ESD. The order of concurrence/ signature for the final ESD is first to the Maine Department of Environmental Protection; then to the Commanding Officer at Naval Air Station Brunswick, Maine; and then to the U.S. Environmental Protection Agency. Once the final ESD has been approved and concurred to, please return the signed ESD to EA for copying and distribution to those on the Naval Air Station Brunswick distribution list.

If you have any questions, please do not hesitate to contact Mr. Lonnie Monaco at (610) 595-0567, Ext. 164, or Al Easterday at (781) 275-8846.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Alexander Easterday'.

Alexander C. Easterday, P.G.
CTO Manager

ACE/mkp
Enclosure

RESPONSE TO COMMENTS FROM THE STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION ON THE DRAFT FINAL EXPLANATION OF SIGNIFICANT DIFFERENCE FOR THE RECORD OF DECISION FOR THE INSTALLATION RESTORATION PROGRAM REMEDIAL ACTION FOR THE EASTERN PLUME, NAVAL AIR STATION, BRUNSWICK, MAINE

COMMENTOR: Claudia Sait

DATED: 6 October 2000

I had a chance to compare my earlier comment letter with the draft final Explanation of Significant Difference (ESD). The following comments are primarily editorial.

1. Please respond as requested to Comment No. 15 of my letter dated 23 August 2000. While a verbal response was provided, a written response is required for the record.

For your convenience, the comment was:

Page 4, Description of the Explanation..., Paragraph 2: Are these dates tentative? If so, this should be noted. MEDEP is concerned with the ambitious schedule for the infiltration gallery. MEDEP will want to review the basis for the infiltration design and may need to review the proposal to ensure that the injection of the effluent water will not alter the hydraulic control of the plume. (RR)

Response—The current date for the equipment change at the treatment plant is anticipated to be completed by the end of November 2000, and design completed for the infiltration gallery by the end of December 2000. The Navy will provide the Work Plan to the EPA and MEDEP for their review and comment. Following the final design, the Navy will proceed with construction of the gallery as soon as possible. The infiltration gallery does not, and will not, “inject” effluent into the soils. The gallery distributes the effluent over a defined area and loads the soil with plant effluent by using the force of gravity; it acts the same way a septic leaching field would. It is anticipated that there will be no significant altering of the ground water and that there will not be any altering of the plume, since the proposed area of the infiltration gallery is not within the plume boundaries. A pilot study is planned for the infiltration gallery to evaluate and aid in the final design of the infiltration gallery. The Navy intends on discharging effluent to the infiltration bed(s), used for irrigation, or discharged to the Brunswick Sewer District. The effluent might be discharged using a combination of options, i.e., 60 percent directed to the infiltration gallery and 40 percent to spray irrigation. The Brunswick Sewer will be used in cases of an emergency, maintenance of the system (cleaning air stripper), or equipment change out (i.e., carbon change out). The sentence has been revised as follows:

The Navy plans to complete the treatment plant equipment changes by the end of November 2000, and complete the design of the infiltration gallery by the end of December 2000. The Navy will complete construction of the infiltration gallery as soon as it is feasible to do so. After the infiltration gallery is installed, the treatment plant effluent will be discharged to the infiltration gallery, used for irrigation, discharged to the Brunswick Sewer District, or any combination of these discharge options.

2. **Page 1, Statutory Basis for Issuance of the Explanation...Paragraph 2, Last Sentence**—The Navy is required to publish a notice of availability and a brief description of the ESD in a local major newspaper.

MEDEP recommends the following language: The Navy is required to publish a notice of availability and a brief description of the ESD in a *major* local ~~major~~ newspaper. (ED)

Response—The text has been revised as follows

The Navy is required to publish a notice of availability and a brief description of the Explanation of Significant Difference (ESD) in a major local newspaper.

3. **Page 2, Site Description and History; Paragraph 3, Last Sentence**—Sites 4, 11, and 13 are believed to be past contributors to ground-water contamination in the Eastern Plume.

Thank you for adding this Record of Decision language to the ESD, however, it is now out of place in the paragraph about Site 11. MEDEP recommends moving it to the first paragraph, as follows:

The Eastern Plume is the area consisting of ground-water contamination resulting from releases of hazardous substances. ~~at Sites 4, 11, and 13~~ Sites 4, 11, and 13 are believed to be past contributors to ground-water contamination in the Eastern Plume. (ED)

Response—The text has been moved as recommended and revised as follows:

The Eastern Plume is the area consisting of ground-water contamination resulting from releases of hazardous substances. Sites 4, 11, and 13 are believed to be past contributors to ground-water contamination in the Eastern Plume.

4. **Page 2, Site Description and History, Paragraph 4, 1st Sentence in 2nd Column**—Soil contamination above cleanup levels was not found.

To avoid the negative, MEDEP recommends: No soil contamination above the cleanup levels was found. (ED)

Response— The sentence has been revised as follows:

No soil contamination above the cleanup levels was found.

5. **Page 3, Justification..., Paragraph 1, 2nd Paragraph**—The report recommended changing treatment equipment from ultraviolet oxidation to air stripping with carbon capture in order to increase removal efficiency from about 50 percent to more than 99 percent and will result in effluent contamination concentration which will be less than Maximum Contaminant Levels or Maximum Exposure Guidelines.

To avoid a run-on sentence, MEDEP recommends the following language:

The report recommended changing treatment equipment from ultraviolet oxidation to air stripping with carbon capture in order to increase removal efficiency from about 50 percent to more than 99 percent. This conversion will result in effluent contamination concentrations less than Maximum Contaminant Levels or Maximum Exposure Guidelines. (ED)

Response—The sentence has been revised as follows:

The report recommended changing treatment equipment from ultraviolet oxidation to air stripping with carbon capture in order to increase removal efficiency from approximately 50 percent to more than 99 percent. This conversion will result in effluent contamination concentrations less than Maximum Contaminant Levels or Maximum Exposure Guidelines.

6. **Page 3, Justification..., Paragraph 2, Last Sentence**—The institutional control to restrict the use of ground water is noted as Restriction on Excavation Activities NASBINST 5090.1A. On Page 4, in the last sentence of Paragraph 2, it is shown as NAS Brunswick Operating Instruction 5090.1A. The name of the document must be consistent. MEDEP recommends using “NAS Brunswick Operating Instruction 5090.1A, Restriction on Excavation Activities.” (ED)

Response—All citations for the operating instruction in the final ESD have been cited as the NAS Brunswick Operating Instruction 5090.1A, “Restriction on Excavation Activities.”

7. **Page 4, Justification..., Paragraph 3, Last Sentence**—The NAS Brunswick Operating Instructions will not be modified in any way that affects the land use restriction or the Eastern Plume remedy.

This statement really locks the Navy in. It might be preferable to the Navy to say:

The NAS Brunswick Operating Instructions will not be modified in any way that affects the land use restriction or the Eastern Plume remedy without EPA and MEDEP approval.

Please be sure the name of the document is consistent with your response to Comment No. 6. (ED)

Response—The text will be revised as follows:

The NAS Brunswick Operating Instruction 5090.1A, “Restriction on Excavation Activities,” will not be modified in any way that affects the land use restriction or the Eastern Plume remedy without EPA and MEDEP approval.

8. Upon checking MEDEP Comment No. 16, it is apparent that the Navy did not change anything in their figures except the 1991-1990 limits of the Eastern Plume. Therefore, the Navy needs to respond to the remainder of the Department's comment about differences in the figures compared to the Record of Decision figure. (RR)

Response—The MEDEP comments were addressed in the ESD figure edits from the draft ESD to the draft final version of the ESD. The colored areas, representing the sites, were adjusted. ESD Figure 1 "Site Plan for Sites 4, 11, and 13 and Eastern Plume" is not the same as the Record of Decision's Figure 1 "Site Location Map." However, the Navy believes the site areas are better represented by, and located in, the figures of the ESD rather than the Record of Decision Figure 1, which has no landmarks to locate the blackened circles representing the site areas in the Record of Decision figure.

**RESPONSE TO COMMENTS FROM LEPAGE ENVIRONMENTAL SERVICES ON
THE DRAFT FINAL EXPLANATION OF SIGNIFICANT DIFFERENCE FOR THE
RECORD OF DECISION FOR THE INSTALLATION RESTORATION PROGRAM
REMEDIAL ACTION FOR THE EASTERN PLUME,
NAVAL AIR STATION, BRUNSWICK, MAINE**

COMMENTOR: Carolyn Lepage

DATED: 10 October 2000

The following comments on the September 2000 Draft Final Explanation of Significant Difference (ESD) for the Record of Decision for the Installation Restoration Program Remedial Action for the Eastern Plume are submitted on behalf of the Brunswick Area Citizens for a Safe Environment. We had commented on the August 2000 Draft ESD in our letter to Mr. Art Coccoli dated 28 August 2000. Most of the comments in that letter have been addressed to our satisfaction. Our outstanding comments are included below. In addition, we agree with most of the Maine Department of Environmental Protection's (MEDEP) comments in Claudia Sait's memorandum to Tony Williams dated 6 October 2000 and we will not repeat the issues where we are in agreement. Our comments on the Draft Final ESD are as follows.

1. ***Page 1, Introduction and Subsequent Sections***—We had commented in our 28 August letter that the text of the ESD refers to the 1998 Record of Decision and several other important documents, and that a reference list that includes all documents mentioned in the ESD should be added at the end of the document. However, a reference list has not been added to the Draft Final ESD. We think it is very important to know the basis for the actions identified in the ESD and to know where the supporting information can be found. Therefore, we repeat our original comment that reference citations should be provided for the documents mentioned in the ESD.

Response—A reference list has been added for references cited in the final ESD.

2. ***Page 1, Statutory Basis for Issuance of the Explanation of Significant Difference***—The final paragraph of the section states that the ESD and supporting information will be placed in the Administrative Record at the Brunswick Public Library and will be available for public review. This information is also repeated on the last page of the ESD. As Brunswick Area Citizens for a Safe Environment member Ed Benedikt stated in his 21 September e-mail to Tony Williams at NAS Brunswick, he visited the Brunswick Public Library on 21 September 21 and asked at the Reference Desk to see the ESD and other related information. Mr. Benedikt was told that the library did not have the material. This represents a breakdown in the public participation process. It is important that relevant materials, including the Administrative Record, be available for the public to review, especially during a public comment period. Given Mr. Benedikt's recent experience, it is appropriate for the Navy to review current information repository procedures and locations to ensure that the public has ready access to the Administrative Record.

Response—The Navy regrets that the reference librarian was unable to provide the library's copy for Mr. Benedikt's review; however, the Navy did provide the library with a copy of the ESD for the reference desk 2 days prior to the Restoration Advisory Board Meeting. The Navy also provided five additional copies for the library after Mr. Benedikt notified Mr. Anthony Williams, Environmental, that he was unable to review the document. The Administrative Record is maintained and managed by the Navy and documents are inserted in the Record after they are finalized. If a person feels that the library's Administrative Record is incomplete, the Navy maintains a second Administrative Record at the base, which is available for review by making an appointment with Mr. Anthony Williams at NAS Brunswick, Public Works Environmental, Building 53. The Navy is proceeding with digitizing the Administrative Record, which will reduce, if not eliminate, Record documents having pages removed, misplaced, or destroyed. In the near future, the Record will be maintained on compact discs, which will be updated on a regular basis.

3. **Page 3, Justification for this Explanation of Significant Difference**—In our 28 August letter, we stated that it was still unclear what NASBINST 5090.1A "Restriction of Excavation Activities" is and that information should be added to the text. The minor revision to the text in this section and on Page 4 does not adequately explain what NASBINST 5090.1A is. We are particularly interested in why and how it is protective. The text should be revised.

Response—The following text will be added to the end of the second paragraph in this section:

The NAS Brunswick Operating Instruction 5090.1A, "Restriction on Excavation Activities" is a Navy instruction that applies to, and regulates the excavation practices of, military, civilian, and contractor personnel who live and work on Naval Air Station Brunswick. Violations are punishable by the Uniform Code of Military Justice, civil service personnel policies, and applicable federal contracting regulations.

4. **Page 3, Description of the Explanation of Significant Difference**—The Navy is proposing to change the method for treating contaminated ground water to air stripping. Brunswick Area Citizens for a Safe Environment is particularly concerned that operations and maintenance requirements for the new treatment system be sufficient to prevent atmospheric discharges. In addition, should there be a malfunction, the system should be shut down and the regulatory agencies notified immediately.

Response—This is an operation and management issue, and will be reflected in the treatment plant Operations and Maintenance Manual that will be revised to reflect the new treatment technology (air stripping with carbon polishing). The same notification procedures and alarm conditions currently in place and practice will continue with the new treatment plant system. As a reminder of the current process, if there is a plant malfunction, the plant automatically shuts down to prevent a release to the environment and an alarm is activated at the NAS Brunswick dispatch office, which is staffed 24 hours/day. The plant operator is notified and responds to the alarm condition at the plant. Depending on the severity of the alarm condition (i.e., a release, or a potential release to the environment) the plant operator

immediately notifies the Navy Remedial Project Manager, Mr. Orlando Monaco, and the NAS Brunswick Environmental Engineer, Mr. Anthony Williams. The Navy Remedial Project Manager and NAS Brunswick Environmental Engineer will then notify the appropriate regulatory agencies within 24 hours. If the plant shuts down, or alarm conditions are encountered, they are documented in the ground-water extraction and treatment system monthly report sent to the NAS Brunswick Environmental Engineer and the Navy Remedial Project Manager at Northern Division.

5. **Page 4, Description of the Explanation of Significant Difference**—The second bullet in the left column states that the treated effluent may be used to irrigate the soccer field that is located adjacent to Building 50. While we support the concept of using treated effluent to irrigate appropriate areas, we are not able to comment on the Navy's proposed use of the area adjacent to Building 50 as we do not have specific details regarding volume of water, rate of application, hydrogeologic setting, etc., at this time.

Response—Currently, irrigation information is unavailable since this discharge option has not been designed. However, we do know that its use will be seasonal and optional, so flow rate and application estimates would be pretty inexact. As for hydrogeologic settings, precipitation in this area infiltrates into the sandy soils, and there are no storm drainage channels in the immediate vicinity of the subject field. However, if any runoff from the athletic field should somehow flow to surface water streams, it would be monitored under NAS Brunswick's stormwater compliance program and regulated by NAS Brunswick's stormwater permit for volatile organic compound concentrations. The Navy is developing a Work Plan for the infiltration gallery, which will present the effluent discharge options (infiltration gallery, spray irrigation, or a combination of discharge to both the gallery and spray irrigation) for the treated plant effluent. The Navy will provide the Work Plan to EPA, MEDEP, and the Restoration Advisory Board for review and comment.

6. **Page 4, Description of the Explanation of Significant Difference**—The third bullet states that institutional controls that prevent use and contact with ground water without regulatory agency approval will be added via this ESD. Institutional controls must also prevent activities that would have a negative impact on the ground-water extraction and treatment system or otherwise adversely affect the selected remedy. The third bullet should be amended to include this aspect as well.

Response—The following sentence has been added to the end of this bullet as follows:

The Institutional Controls are also intended to prevent activities that would have a negative impact on the ground-water extraction and treatment system or otherwise adversely affect the selected remedy.

7. **Page 4, Description of the Explanation of Significant Difference**—As we noted in our 28 August comments, the process for developing land use restrictions should also include the means of communicating the information to the public, perhaps through the Restoration Advisory Board meetings. However, no revisions were made in the Draft Final ESD. The paragraph at the bottom of the left column and at the top of the right column should be

revised to specify how the public will be informed, especially regarding the transfer or lease of any real property that affects the Eastern Plume.

Response—The subject of land use control is quite complex and is currently being worked out by the Department of Defense with the U.S. Environmental Protection Agency and individual state governments. An “Interim policy on Land Use Controls Associated with Environmental Restoration Activities” (31 August 2000) was recently published by the Department of Defense; however, the Navy believes it would be inappropriate to state specific land use control procedures in this ESD fact sheet. The Navy believes the existing provisions of CERCLA 120(h)(3) adequately ensure that regulatory agencies and the Restoration Advisory Board are involved with decisions regarding the lease or transfer of property. The Navy will provide notice to the public and the opportunity for public comment by issuing public notices, or holding public meetings, with regards to leasing or the transfer of property at NAS Brunswick.

8. **Page 4, Description of the Explanation of Significant Difference**—Does the Navy still believe it will begin discharging treatment plant effluent to the infiltration gallery by mid-November?

Response—The current date for the equipment change at the treatment plant is anticipated to be completed by the end of November 2000, and design completed for the infiltration gallery by the end of December 2000. Following the final design, the Navy will proceed with construction of the gallery as soon as possible. The sentence in this section has been revised as follows:

The Navy plans to complete the treatment plant equipment changes by the end of November 2000, and complete the design of the infiltration gallery by the end of December 2000. The Navy will complete construction of the infiltration gallery as soon as it is feasible to do so. After the infiltration gallery is installed, the treatment plant effluent will be discharged to the infiltration gallery, used for irrigation, discharged to the Brunswick Sewer District, or any combination of these discharge options.